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# ANCIENT AND MODERN HYGIENE CONTRASTED.—THE INFLUENCE OF CIVILIZATION ON THE DURATION OF LIFE.

By CHARLTON T. LEWIS.

A DISCOURSE AT THE ANNUAL MEETING, BOSTON, OCTOBER, 1876.

THAT the State is the final cause of the individual, was the political theory and the moral law of the highest ancient civilization. The citizen's rights and duties were measured and limited by the interests of his city; his glory lay in what, by living or dying, he could add to its glory. That the individual is the final cause of society was the early Christian theory, which disintegrated the Roman Empire, which set up above the work of war and of statesmanship the saving of each man's soul, and which, slowly purified from king-craft and priest-craft, survives in the democratic politics, and in most of the economical and social science of our own day. The conflict of these two theories, in its many phases, has been the best part of history; for it has been the conflict of ideas, and of minds loving the truth, while the rest has been the struggle of grasping selfishness, or of passion. Yet this conflict has been but the prophetic shadow of one more momentous, which begins in our own day, and in which is destined to move and work, for hope or for despair, the intellectual life of generations to come. The relation of individual man to organized society is but one of the outward forms assumed by his profounder relation to the human race; and it is with this relation, as determining the meaning of his nature — physical, mental, and moral — that modern thought must deal. Is the end of our being to be sought in the individual or in the race? This may be presented as the final problem, alike of science, of philosophy, and of religion. Immanuel Kant had, perhaps, the sharpest mind's eye that ever tried to scrutinize mind. But long before he began his immortal researches into the basis of certainty, his studies had taken a still wider range. In early life he wrote some fugitive papers for an obscure journal, which I have not now within reach, and of which I can speak but vaguely from recollections of a perusal many years ago. But one thing is certain, that in them he foreshadowed the great problem which was to occupy coming ages: he saw and declared that the persistent race and the transient individual are the poles of thought,

and that around these the mind of the world must yet move. Doubtless Emerson had read these papers, when, in one of his early essays, he pointed out the mystery of nature, "the race never dying, the individual never spared." And Tennyson had certainly read them, when he translated their thought with startling fidelity, in one of the most suggestive passages of the "In Memoriam," —

"The wish that, of the living whole,  
No life may fail beyond the grave,  
Derives it not from what we have  
The likest God within the soul?"

"Are God and nature then at strife,  
That nature sends such evil dreams?  
So careful of the type she seems,  
So careless of the single life,

"That I, considering everywhere  
Her secret meaning in her deeds,  
And finding that of fifty seeds  
She often brings but one to bear,

"I falter where I firmly trod."

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These were but the prophetic utterances of seers, dimly apprehending from afar the revolutionary thought of the next age. I must not weary you at the threshold of my subject, or it would be in place to point out how the history of ideas for a century past has revolved around the same centre, approaching it more and more closely. Kant himself, in after life, became the source of a magnificent series of movements, including many of the noblest efforts ever made to reach 'absolute truth, and culminating in the Hegelian philosophy; the practical meaning of the whole of which was resistance to the inevitable tendencies of the time; efforts to centre the universe in the individual man, though only by raising him to a higher level and presenting him as pure intellect. It was impossible; and the philosophy of the great German school is as far behind us now as that of Aristotle or Spinoza. On the other hand, the greatest of French thinkers, Comte, catching the spirit of the age, attempted to build up his universe of thought on the new conception — the absolute subordination of the individual to the race; and failed to become the acknowledged teacher of our times only, perhaps, because he built by old methods and with old materials on the new basis; because the times were not yet ripe, and the key to the relations of the race with its members was not in his hand. Had he but grasped the two master-thoughts of our own day, — the conservation of force in physics, and the origin of species by natural processes in biology, — he would doubtless have developed the continuity of nature in a system almost fitted to fulfill his dream of organizing and lastingly enslaving the human mind.

I have called your attention to this problem, not because I propose to discuss it, or even to state it fully, but because my special subject this evening leads up to it, and derives interest and value from it. To what extent man is merely a species, a product and a part of the system of nature, and

to what extent, if any, he is an exception to it, or above it, are questions which are closely linked with all intelligent study of ourselves and our surroundings; and it is in the light of these questions that I have sought to explore one little subordinate corner of the boundless field — the changes, if any, which civilization brings about in the average duration of human life, and the causes which produce them. The subject is fascinating, because it has never, so far as I can learn, been thoroughly examined; because it furnishes the most simple and definite measure which can be applied to so vague a conception as progress; and because it seems, at first sight, as if there must be a vast amount of trustworthy evidence accessible upon the average age attained by mankind in all periods of history. After spending a very considerable amount of time, however, in the effort to find and collect this evidence, I am compelled to acknowledge that the results are vague and meagre, and that some centuries of statistical records, such as have never been kept in any country until within the last two generations, will be necessary, before the effects of culture upon longevity can receive an accurate and scientific statement.

It is beyond question that civilized man lives longer than the savage. Our days, on the average, are many more than those of our ancestors of the stone age or the lake period. Some degree of civilization is therefore favorable to longevity. But when we ask whether the extension of life continues as enlightenment grows, the question becomes complicated. A generation ago it was asserted with confidence that the specific duration of human life has for some ages been increasing perceptibly, and so rapidly that tables of mortality made from the experience of one generation are inapplicable to the next. This doctrine will be found throughout much of the most worthless literature in the world — the books on longevity — stated as if it were an obvious law of nature; but the only pretense of proof is that the famous Northampton table of mortality, and others constructed by similar methods, have been found to show a much shorter expectation of life than the experience of our own day. The science of statistics, however, has long left such notions behind, and has shown that the inaccuracy lies in the methods of constructing earlier tables. They do not properly represent the law of mortality at the period and in the community for which they were made; and it is only in very recent times that statistics have been collected with care enough, and on a basis wide enough, to establish that law. Nor are they now so collected, except in a few European cities, as to be of value for this purpose. The American people ought to understand that the cumbrous mortality statistics published by the United States Census Bureau are of little value in scientific investigation; and that even the great improvements introduced by its recent administration, have but served to expose the imperfection of the system. The mortality tables it has constructed are not so much inductions as conjecture; and the only trustworthy evidence in existence, showing the actual influence of our own climate, institutions, and society in modifying human vitality, is that which has been gathered by business corporations — the Life Insurance Companies.

The sanguine doctrine of the rapid increase of life being exploded, it has become the fashion with a skeptical school of statistical writers to argue

that no improvement has taken place ; that the inadequate information we have points the other way ; and that the luxury, ease, freedom from exertion, vices, and, above all, the hereditary accumulation of physical ills in civilized man, are probably shortening the tenure of life, perhaps even threatening the ultimate extinction of the more cultivated races. Many of you remember an unsavory discussion which agitated the intellect of Boston two or three years ago — echoes of which are still sometimes heard from the lecture-desk or the press — on the rapid tendency of Massachusetts to relapse into barbarism, from the decline in numbers of the native-born and intelligent people before the multiplying vitality of the ignorant classes. This kind of reasoning sometimes leads to amusing results. Thus Mr. Ray Lankester has published a work on “Comparative Longevity,” in which he makes this startling remark : “Were the evolution not always in advance of the provoking cause, we might anticipate the extinction of humanity, by the excessive competition and the excessive difficulties of existence which must always accompany increased population.” Dr. Hough, of Philadelphia, in one of the most elaborate discussions yet presented to this Association, insists that there is a progressive decline in the vitality and longevity of the American people. “If,” he says, “all the inhabitants of the globe were living in cities of the magnitude of London, and subjected to the same influences connected with the movement of population, the whole human race would become extinct in a century or two.” It is hard to believe that the human race will ever die out, as long as the earth is crowded with men ; or even as long as cities of the size of London remain. Nor, because enthusiasts have believed in an exaggerated and absurd extension of human life, and have supported the belief by mistaken facts, need we infer that the life of man is really growing shorter.

Not troubling you with the detailed facts, which seem to me to prove the contrary, I shall simply cite the highest authorities on the subject. Professor Owen, the great anatomist, has examined the subject as respects Great Britain, and is satisfied that the average life there is higher now than in the last century. Sir Thomas Duffers Hardy has searched the records of the English courts for four hundred years, from the thirteenth century to the sixteenth ; and among their innumerable notices of age, finds no instance of a man who had survived his eightieth year, and proofs enough that the age of seventy was rarely reached, and was regarded as extreme. Mr. Finlaison, the statistician, has studied the results of the Tontine Associations in England, from the seventeenth century down, and has shown that the expectation of life among the classes who invest in such funds has gradually increased full twenty-five per cent. during that period. Kolb, the careful and sagacious German writer on comparative statistics, sums up the case thus : “The meagre facts known indicate that the maximum age of man has remained nearly the same for centuries and even thousands of years ; but that the number of persons who reach extreme age, and especially the number who survive infancy, has very materially increased.” I have examined, I think, substantially all the evidence in existence upon the subject, and find these moderate judgments to be sustained by it.



Now this improvement is just what we should expect. It depends on no mysterious law of development, no innate tendency to an increase of vitality. It is the necessary result of agencies so obvious and so powerful in our civilization, that we need statistics not so much to prove their existence as to measure their effects. Let me enumerate them:—

1st. The first is the improved care taken of infants. In savage life the babe is scarcely protected except by the mother's instinct. If this is interrupted by accident or disease, it perishes at once. It is liable at all times to fatal exposure. Step by step, improvement is made as men become civilized. In Soranus, a famous medical writer of the second century, we find an elaborate discussion of the care of infants. The Thracians and Macedonians, he says, always bound the new-born child firmly, hand and foot, to a hard, flat board. The Thessalians hollowed out the board to the shape of the body, and put in a stuffing of hay. These nations, like some North American Indians of our time, thought it necessary to hold the child motionless during its early life. Soranus himself advises that it be wrapped closely and firmly in woolen bandages, and that careful manipulations be practiced, to give shape to its head and spine. The Germans and Scythians, he tells us, and many of the Greeks, used to dip the new-born in cold water, to test its vital strength, and try whether it was fit to be reared. Soranus, who represents the highest skill of his period, warns parents against giving the babe its natural food, the mother's first milk. This must be thrown away, and goat's milk and honey substituted. Thus we might trace step by step the slow progress of medical science, and the slower progress of custom, towards the very moderate degree of excellence in both which now prevails; and remember that every step in each of them represents a gain of countless lives.

Let one proved fact illustrate the gain already secured. In London, 175 years ago, when the population was less than 675,000, the annual deaths of children under five years were 9,500. In 1810, when the population had increased to 1,050,000, this class of deaths had been reduced to 5,500 yearly—a saving of 62 per cent. on the average. Similar facts might be multiplied from statistical records, wherever health has been intelligently studied and sought. Of all the achievements of sanitary science, the greatest has been the rescue of these innocents from wholesale slaughter; yet this is still the most awful and the most hopeful field for its work. In every land, human motherhood is still a Rachel weeping for her children; the children are dying from causes which might be prevented. There is room here for boundless preaching, but where lies the responsibility? In Shakespeare's words,—

*“Who lets so fair a house fall to decay,  
Which husbandry in honor might uphold  
Against the stormy gusts of winter's day,  
And barren rage of death's eternal cold?”*

We find, then, that an infant's chance of surviving to maturity is steadily increased as civilization advances.

2d. Substantial improvement has been made from age to age in the care

of the sick, the infirm, and the old. Among savages, every serious illness ends in death. The mutual help and care by which lives which cannot support themselves are supported by others is the product of society, and grows effective as social ties are strengthened. Even in this century, and among people which have something like a social organization, the custom of putting to death those who survive their strength has been found in full force. Every stage of progress, from this barbarism to the humanitarianism of our hospital and almshouse system, may be traced, and the obvious result is a gradual lengthening of the average life.

3d. Another important agency is the avoidance of epidemics. It is hard for us to understand the horrors of these visitations in former ages. There are no more thrilling pages in literature than those which depict them. The plague of Athens, as described by Thucydides and Lucretius; those of Italy, truthfully reported in the romances of Boccaccio and Manzoni; Defoe's story of the plague in London; the accounts given by German and French chroniclers of the Black Death of the fourteenth century, — all these are fresh, with their fullness of immortal agony, in every reader's mind. And thousands of such pests have swept across nations, and left no such records. In our times, vast tracts of Africa have been depopulated by fever; whole tribes of Indians have been destroyed by small-pox. We are exempt from such disasters. It seems that civilization has outgrown the danger of them. The test has been applied. When the cholera began its march across the civilized world, it was made dreadful to the thought by its ravages in the East, and by association with the plagues of history. But it touched enlightened nations too lightly to revive such memories. Of the 40,000,000 of people whom it slew in the half century after the wars of Napoleon, but the smallest fraction fell in Christendom. A century ago the small-pox was the scourge of mankind. Its deaths numbered 400,000 a year in England. La Condamine, the first authority in his day, who died in 1774, asserts that it then carried off one tenth of mankind, and disfigured as many more. It is practically abolished by a single discovery, which has added two years to the average life of man in Central Europe. The victories of civilization over some other diseases have been scarcely less signal. For example, scurvy in our navy has been exterminated. Death from it is now literally unknown. I have not been able to find the statistics of its earlier ravages there; but in the British navy, for two hundred years back, the mortality by scurvy exceeded that by battle, wreck, and all the calamities of sea-life together. Sanitary science has done away with it. In the thirteenth century, leprosy was at least as common as measles now are. Matthew Paris perhaps exaggerates the number of lepers, when he tells us of 2,000,000 in France, and of 19,000,000 in Europe; but the disease was a general plague, and has disappeared before civilization. In the same way typhus, dysentery, yellow fever, scarlet fever, in different degrees, are beginning to yield up their fatal energies, and we are learning to hope and strive for their extermination.

Other great calamities have been overcome or reduced in their proportions by the progress of society. Thus famines figure in the history of all uncivilized countries as causes of immense mortality. A large proportion

of the whole people of Germany starved to death during the latter part of the Thirty Years' War. Mr. Froude finds that at least 200,000 lives were directly destroyed by the Irish famine of 1846. These are the frightful exceptions of an imperfect civilization ; but in Germany, Ireland, or this country, now, one death by famine is enough to agitate the community and is nearly impossible ; while in some barbarous countries, more lives are ended by want of food than by disease or accident. Civilization, by its arrangements for storing and distributing food, and by the greater certainty it gives to agriculture, prevents alike general famine and individual starvation, and thus lengthens the average life.

4th. Finally, I must dismiss, with a mere reference, a large class of causes which are working in the same direction : our advancing knowledge of the laws of health, and numberless applications of them, public and private ; in police regulations, building laws, quarantines, and public works ; in the construction of dwellings, the heating and ventilation of rooms, the preparation of food and clothing, the hours of labor and rest. In all these there has been a slow practical improvement for ages ; and there now begins to be a scientific improvement which promises to be much more rapid.

In order that these remarks may not fill a volume, I must omit to discuss here the application of the doctrine of heredity to these forces, by which the impression they make upon the physical frame of Man, in any generation, increasing its vigor, vitality, and possible duration, is transmitted to posterity, and thus accumulated from age to age. It is this law which coordinates all the influences we have enumerated, and combines them into one movement, continuous and progressive. We may fairly affirm, then, that the average duration of human life is the most definite measure we can apply to the advance of civilization. The lowest races of mankind, in Sumatra, Borneo, Australia, New Zealand, Central Africa, Patagonia, are alike in this, that their life is short. Female beauty is in its prime at fifteen ; it decays after twenty-two. Man is old at forty ; he rarely reaches fifty, or only in extreme decrepitude. If we turn from this state of life, in which our ancestors doubtless once stood, to the nations of Christendom, and classify them in the order of the average duration of life, we shall have arranged them also in the order of wealth, good government, and intelligence. Average longevity is at once the most potent agency in producing these elements of prosperity, and the result which the forces of civilization unite to effect, and on which their energies are concentrated. In an economical point of view, this relation is obvious ; for the lengthening of life implies, above all, the lengthening of the productive period, — the increased proportion of producers to drones, and a diminished waste in unproductive lives. Herbert Spencer, after a careful survey of the biological aspects of human development, in one of the most suggestive books of our age, finds the fundamental act in the restless antagonism between the development of the individual and the perpetuation of the race ; and that this conflict "insures the final attainment of the highest form of this maintenance, — a form in which the amount of life shall be the greatest possible, and deaths the fewest possible." In other words, the lengthening of the average individual life measures human progress.

Now an eminent school of scientific men are teaching the doctrine of natural selection, or the survival of the fittest, as the key to all progress in nature. I wish distinctly to bring out the startling contrast between this law and the laws of progress in vitality which we have found actually at work in human history. The first condition of natural selection is wholesale slaughter. It begins by assuming the principle of Malthus, that life tends to multiply beyond the possibility of preservation; of the infinite mass that come into being, nearly all must perish unfulfilled. Who shall the survivors be? Those, of course, who, by superior vigor or by greater harmony with their environment, are most fit to survive. These alone live to reproduce their kind, and transmit the superiority which has preserved them; and thus, in successive generations, the race accumulates the qualities which promote life. Thus the natural process of advancement is founded on limitless waste; the growth of life is in the soil of boundless death; the better form springs ever from a world of graves. Mr. Huxley tells us that the law of evolution, founded on this conception of natural selection, as explaining the mode in which the organic world around us has arisen, stands on a basis of evidence comparable to that which supports the Newtonian theory of the solar system. Let us admit it, then, to the full extent claimed. Admit that man himself, in the structural differences between him and lower forms, is the product of this law, and that, up to the time when he became distinctly human, as contrasted with his quadrumanous kindred, his development was governed by it. We shall see that his human progress is of an entirely different character. Observe that the forces which we find at work in the physical and mental growth of man are not merely independent of natural selection; they are exclusive of it, and at war with it.

Look at each of the agencies we have enumerated. Of a generation of infants entering the world, natural selection says, Let them meet hardship, severity, disease, which will destroy all but the most vigorous, and leave these to become the parents of a hardier race. To the infirm of all ages, the diseased, the old, it says, Perish out of my way. You are worthless of yourselves; and, if allowed to multiply, you but perpetuate helplessness and increase misery. Of epidemics it says, Let them rage; they may sweep away strong and weak together, but not without discrimination. They destroy a larger share of the feeble, and leave the average strength of the race and its posterity greater than before. By the standard of natural selection, it would be clear gain that the human race should be exterminated to-day, saving only a handful of the most perfect humanity, to repeople the world after a higher standard.

But the foundation of society introduces the opposite principle. Family affections and social ties have their meaning in the value of the individual life to others; its value to society at large is a central thought of civilization. The preservation of each by the common work and mutual aid of all is the aim of government and law; the basis of families, communities, and nations. Thus the formation of society is the reversal of the blind law of unconscious advancement, and its every step forward weakens the forces on which this natural development depends. Its history is a struggle against

the conditions of natural selection, and a steady reduction of its area of influence. Society preserves, for the progenitors of the future, alike the weak and the strong, the diseased and the healthy. If, then, this blind law is the one key to progress, man must degenerate. Pessimists, then, are right in holding that all our charities, public institutions, sanitary improvements, the very order of society itself, are but means of protecting the weak against the sentence of nature, and of perpetuating their weakness. Benevolence is then but folly, mercy a crime, the charities of civilized life a pernicious force, working for the degeneracy of the race.

There is but one reply: Civilization does largely sacrifice one principle of progress — the law of evolution by survivorship; but it introduces another more potent principle. Under natural selection, improvement must needs be fitful, occasional, and immeasurably slow; because the variations upon which it works and among which it chooses, are but casual deviations from an average standard, which it can at most catch and preserve. But civilization possesses the element of individual culture, by which the standard itself is raised from generation to generation. Society educates the child into a higher type of power, endurance, and refinement than that in which he was born; its effects are stored up in muscle, nerve, and brain, and through him transmitted to posterity, and thus accumulate from age to age. Under natural selection, when variations in capacity arise, thousands of them are wasted where one is secured, fixed, and transmitted. But human society economizes much of this waste, fastens upon and improves an immensely larger proportion of the capacities lavishly produced by nature, and thus concentrates, in the brief historical movement, forces which would otherwise spread their operation over countless ages. Thus it is the characteristic of civilization that the hereditary accumulation of intellectual and moral culture gradually supersedes the unconscious and physical law of selection as the agency of progress.

Now history, while it has been a struggle between these two principles of advancement, has also been a test of their comparative power. Natural selection, as its ablest expounders have shown, works with such extreme slowness, under the most favorable circumstances, that the progress of its work has never yet been detected by observation. No instance is known of its having effected any marked and important change in any race of creatures, during the period of history. Vast as is its cumulative force, it is exerted only in the course of ages defying our imagination to span; and to accomplish a small part of its work, it must cleave its path of misery and slaughter through epochs measured only by the formations of geology and the cycles of the stars. But the intellectual and moral forces of culture, which have superseded it in man, have actually, within the brief space of a few thousand years, achieved the world of happiness in which we live. The rocks register the story of a blind evolution, which they tell us is still going on as rapidly as ever, yet so slowly that the eye which watches for a few centuries or millenniums can discern no movement; they cannot explain those laws, by which, within generations too few to make one of their minor epochs, the beast-like companions of the cave bear and the mammoth — the

wandering barbarians of the flint period — have produced the intellects of Shakespeare and Newton, the scientific culture and the free society into which men are now born.

We have seen that where animal evolution ends and human progress begins, the laws of individual and hereditary culture supersede the law of natural selection. An interesting consequence of this is the fact that it makes a place for the prolongation of the individual life beyond the period of vital and muscular activity. Under the reign of natural selection, there is no position in the universe for the being who has passed the reproductive stage of energy. Hence wild animals, soon after this period, usually die ; and, similarly, savage society has no home for old age. But civilization centres wholly in the intellect, whose forces are communicated by other than vital processes — in ideas which move and mould the world through the minds and the posterity of others ; and the intellect, under favorable circumstances, not only continues its work, but grows in efficiency and usefulness after time has impaired the physical powers. It is in civilized society alone that the activity of the brain makes old age valuable ; and as civilization advances, the economy of preserving a strong and cultivated mind through the longest possible period of activity becomes more and more practicable, and yields a richer reward. Thus it is a strictly scientific truth, that the best symbol of progress, the pride of social achievement, the noblest ornament of our race, is the venerable man, who, in a decaying body, preserves the energies of a wise, benevolent, and vigorous mind.

If so much has been done by the semi-conscious work of society in using and developing the natural forces of man, how much might be done by a perfect organization of society for that work ! This brings us to that stupendous conception to which, more in jest hitherto than in earnest, the term stirpiculture has been applied. But we can imagine a future sect of positive philosophers, who shall reason as follows : Man has been produced through vast epochs by natural selection ; he has been immensely improved in one era by the half-conscious, imperfect form of selection which has superseded it ; and it is certain, therefore, that nature has placed in him, in the processes of growth, waste, and decay, an infinite elasticity. Were society organized to improve this elasticity to the utmost, he might rapidly scale heights of being which are unimagined now. Take up the average duration of life, for instance, and make its increase the intelligent aim of society. Subordinate to this aim all the relations and affections of men ; let marriages be planned, posterity sifted, medical and social science directed, for the one end of lengthening life ; and in generations as few as are required by the horticulturist to produce the gorgeous multiple flower from the timid wood blossom, or by the breeder to bring the wind-fleet racer from the ordinary horse, we might become a people of patriarchal longevity. Nay, let society choose its own ends, set before itself the highest conception of a model humanity, and sacrifice all individual and personal aims to its attainment, by a vigorous selection and preservation of every tendency toward it, and then will begin the evolution of the golden age. We can imagine, I say, such a sect of philosophers ; and violently as such a society shocks our

habits of thought, there is a tendency in contemporary mind to something like this system. This is, indeed, the logical extreme toward which our science is pointing; never to be realized in all its naked absurdity, of the absolute loss of the individual in the idea of the race; but destined, as a tendency, followed with greater or less intelligence of its real character, to jar harshly and shock fiercely in the future against the cherished rights affections, and aspirations of the mind, which cannot despise its own personal consciousness, nor unlearn its own hope of immortality.

Thus our special subject leaves us at the threshold of a world of restless thought. And at the close of our study, as at its beginning, the Sphinx of life still stands before us, with her problem unsolved: Is it in the destiny of the race, or in that of the individual man, that we are to seek the end of our being? But if we have not found the answer, we have found reason to be content without it. The two conceptions of life seem to us wide apart, when we contrast work with culture, the creed of the Presbyterian with the creed of the Transcendentalist, the life of John Howard with the life of Goethe. But in the principles which underlie the progress of mankind, we see a tendency to reconcile the two. The capacity for individual culture is a growth from the soil of an advancing race, and the further that culture is carried, the more richness it returns to the soil. So we may be sure that the time and effort wrested from personal growth for the service of society in its thousand forms is not waste for the individual; that the time and effort withheld from social work for personal culture is not lost to mankind; and that every step towards the more perfect organization of society leads to a wiser and more fruitful distribution of its forces between the two ends, making them one. The problem will remain unsolved; the conflict will continue; the man will often groan in discontent that "large results of force" which might have been self-enfolded, must be scattered and spent, though in the service of mankind; crying, —

"I doubt not through the ages one increasing purpose runs,  
And the thoughts of men are widened with the process of the suns.  
What is that to him that reaps not harvest of his youthful joys,  
Though the deep heart of existence beat forever like a boy's?"

But he will more and more rise above himself, merge his own aspirations in those of humanity, and triumphantly add:—

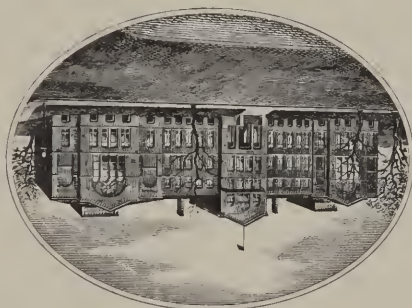
"Not in vain the distance beacons. Forward, forward let us range,  
Let the great world spin forever down the ringing grooves of change.  
Through the shadow of the globe we sweep into the younger day;  
Better fifty years of Europe than a cycle of Cathay."





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